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(71) Applicant (for all designated States except US): SONY  
ERICSSON MOBILE COMMUNICATIONS AB  
[SE/SE]; Nya Vattentornet, S-221 88 Lund (SE).

(72) Inventor; and

(75) Inventor/Applicant (for US only): NECHNER, Thomas  
[DE/DE]; Schlehenring 115, 85551 Kirchheim (DE).

(74) Agent: KÖRBER, Martin; Mitscherlich & Partner, Sonnenstrasse 33, 80331 München (DE).

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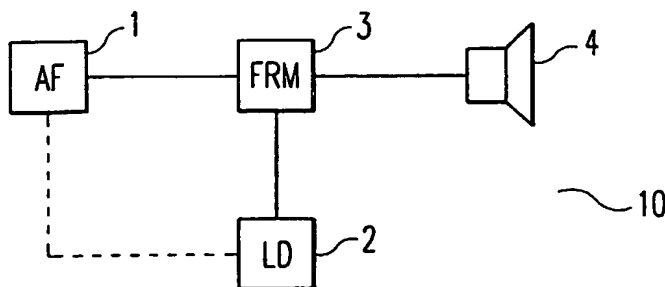
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SIGNAL STRENGTH INFORMATION DEPENDENT CONTROL OF SMALL ELECTRODYNAMIC TRANSDUCERS IN AUDIO SYSTEMS



(57) Abstract: A control circuit for a signal strength information dependant frequency response adaptation of an audio signal for an electrodynamic transducer (4), with a signal strength information determination means (2, 6) for determining a signal strength information according to the level of the audio signal, and a modifying means (3) for frequency selectively modifying the audio signal in response to the signal strength information such, that the electrodynamic transducer (4) converts the audio signal into a low distortion sound signal for high levels of an audio signal and with a flat frequency response for low levels of an audio signal, whereby

a lower frequency range of the audio signal is modified with a gain different to a gain of a higher frequency range of the audio signal and a frequency separating the lower frequency range from the higher frequency range is shifted towards higher values for an increasing level of the audio signal and towards lower values for a decreasing level of the audio signal. The present invention further proposes a mobile telecommunication terminal with an accordingly designed control circuit.

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 03/05648

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 H04R25/00 H04R29/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H04R H04M H04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 2 315 378 A (NIPPON ELECTRIC CO) 28 January 1998 (1998-01-28) claim 1 figures 3,4	1, 14
A	US 4 837 832 A (FANSHEL SOL) 6 June 1989 (1989-06-06) abstract column 2, line 21 - line 61	1, 14
A	US 5 029 238 A (GEHR MARVIN M) 2 July 1991 (1991-07-02) column 1, line 37 - line 63	1, 14

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3016

Authorized officer

Dionisi, M

# INTERNATIONAL SEARCH REPORT

Information on patent family members

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